

**SYSTEM HAVING A SPREAD SPECTRUM CLOCK FOR FURTHER
SUPPRESSION OF ELECTROMAGNETIC EMISSIONS IN NETWORK
DEVICES COMMUNICATING VIA A NETWORK BUS**

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ABSTRACT OF THE DISCLOSURE

A network system includes a network having a network bus, such as unshielded differential twisted-pair wires, electrically connected to a plurality of remote devices, and a network controller for digitally directing transmissions with the remote devices via the network bus. The network system also includes a plurality of network device interface elements adapted to interconnect the network controller with respective remote devices via the network bus. Each network device interface element includes a local oscillator, and is capable of transmitting and receiving messages via the network bus. To at least partially limit electromagnetic emissions from the local oscillator, each network device interface element further includes a spread-spectrum clock. And to further aid in limiting electromagnetic emissions, each network device interface element can further include a suppression assembly.

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